DOCUMENT RESUME

ED 463 849 PS 030 263

AUTHOR Hausken, Elvira Germino; Rathbun, Amy H.
TITLE Adjustment to Kindergarten: Child, Family, and Kindergarten Program Factors.
PUB DATE 2002-04-04
NOTE 22p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 1-5, 2002).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS At Risk Persons; Childhood Attitudes; Comparative Analysis; Disabilities; Family Characteristics; *Kindergarten; *Kindergarten Children; Longitudinal Studies; Primary Education; Sex Differences; Social Differences; *Student Adjustment; *Student Attitudes; Student Characteristics
IDENTIFIERS Early Childhood Longitudinal Survey; Program Characteristics

ABSTRACT

Noting that the kindergarten year is important in establishing competencies critical to children's success and achievement in school, and the lack of information on how children make the transition to kindergarten, this study examined differences in parental reports of children's adjustment behaviors for a large, nationally representative sample of beginning public school kindergartners. The focus of the research was on the prevalence of parent-reported adjustment problems of first-time public school kindergartners and whether some groups of children experience these adjustment problems more than others. The adjustment behaviors examined were: complaining about going to school, being upset or reluctant to go to school, and pretending to be sick to stay home from school. Data were from a subset of 13,602 children from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-1999 (ECLS-K). Parents reported that 72 percent of first-time public school kindergartners did not show signs of adjustment difficulty during the first 2 months of the school year. Thirteen percent showed one adjustment difficulty, and 15 percent exhibited two or more. Certain child, family, and kindergarten program characteristics were related to the percent of children who showed adjustment difficulties. Being male, having a disability, or living in a lower socioeconomic status family were associated with adjustment difficulties. Children attending full-day kindergarten programs and those in class sizes of 25 or more children were more likely to demonstrate adjustment difficulties even after controlling for other child and family characteristic differences. (Contains 6 data tables.) (KB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 463 849

# Adjustment to Kindergarten: Child, Family, and Kindergarten Program Factors

Elvira Germino Hausken
U.S. Department of Education,
National Center for Education Statistics

Amy H. Rathbun
Education Statistics Services Institute/AIR

Paper Presented at the Annual Meeting of the
American Educational Research Association
New Orleans, LA
April 4, 2002

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Elvira Germino Hausken

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)



***This paper is intended to promote the exchange of ideas among researchers and policy makers. The views expressed in it are part of ongoing research and analysis and do not necessarily reflect the position of the U.S. Department of Education.***

PS 030263

BEST COPY AVAILABLE

**Adjustment to Kindergarten: Child, Family, and Kindergarten Program Factors**

Elvira Germino Hausken, *National Center for Education Statistics*
Amy H. Rathbun, *Education Statistics Services Institute*

**Perspective**

The kindergarten year is important in establishing competencies critical to children's success and achievement in school. Kindergarten is a time for children to expand their interests and knowledge about the world, and improve their ability to get along with others. It serves as a training ground for learning the role of student, discovering the norms and precepts of school, learning how to get along with new peers and authority figures and mastering necessary academic skills (LeCompte 1980). In addition, research shows that success during this first year may predict later school success (Belsky & MacKinnon 1994; Ramey & Ramey 1992; Reynolds 1991).

Successful adjustment to school is important for long-term success in school. Beginning kindergarten is a significant rite of passage from preschool and/or home to the primary grades for both children and their families. Teachers report that 52 percent of kindergartners make the transition to kindergarten without difficulty (Cox 1999). Some of the difficulties children experience while making this transition relate to their ability to follow directions and work independently.

The transition to kindergarten can cause a mixture of feelings, including fear, concern, and excitement for both children and their families. Children who are fearful of their new surroundings may withdraw from fully participating in learning activities. What adults consider important about the transition to school differs considerably from what young children consider important. Parents and teachers emphasize the importance of different aspects of social adjustment. Parents place more emphasis on the importance of their children adjusting to other adults, interacting and responding appropriately with nonfamilial adults (Dockett and Perry 1999) while teachers stress following directions (Cox 1999). On the other hand, children place great importance on making friends and having friends at school (Dockett and Perry 1999).

There is a paucity of information on how children make the transition to kindergarten (Pianta, Rimm-Kaufmann, and Cox 1999). To fully understand how well children adjust to kindergarten, information about the prevalence of behaviors that suggest avoidance or distress toward school is necessary. This paper examines whether certain child, family well-being and kindergarten characteristics increase the odds of children displaying early adjustment problems (i.e., child behaviors that suggest avoidance or distress toward school) in kindergarten. Knowing and understanding the relationships these characteristics have to early school adjustment can aid parents, teachers, schools, and policy makers in developing programs and providing resources to increase the potential for more positive first school experiences.

This research examines differences in parental reports of children's adjustment behaviors for a large, nationally representative sample of beginning public school kindergartners. First, the research describes the prevalence of children exhibiting three types of negative behaviors. Next, bivariate relationships between the adjustment behaviors and a select set of child, family, and kindergarten program and school characteristics are examined. Finally, logistic regression analyses are used to further explore each of the adjustment behaviors and its relationship to these. Specifically, this research examines the following two questions:

- *What is the prevalence of three types of parent reported adjustment problems of first-time public school kindergartners?*

- *Do some groups of children experience these three types of parent reported adjustment problems more than others?*

## Method

Information on children's adjustment behaviors comes from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-1999 (ECLS-K).[1] The ECLS-K captures information on children, their families, their teachers, and their schools. The ECLS-K design is based on a framework, in which the child's physical, cognitive, and socioemotional development are considered across multiple contexts, including home, school, and community. A nationally representative sample of approximately 22,000 children enrolled in about 1,000 kindergarten programs during the 1998-99 school year were chosen to participate in the study. Computer-assisted telephone interviews were conducted with parents of the sampled children in the fall of 1998 and spring of 1999. In addition, school administrators and kindergarten teachers of the sampled children were asked to complete a set of self-administrated questionnaires describing information about themselves, their students, and their classrooms in the fall of 1998 and the spring of 1999. The data used in this paper come from these three sets of respondents.

The analyses in this paper use the subset of 13,602 children who were first-time kindergartners, who attended public school kindergartens that offered full-day and/or part-day programs, and whose parents completed an interview in the fall of 1998 (table 1). When appropriately weighted, the sample is representative of 3,147,000 children enrolled in public school kindergartens for the first time in the fall of 1998. All differences described in this paper are significant at the .05 level of probability, with Bonferroni adjustments for multiple comparisons.

This paper examines the link between several child, family, and kindergarten program factors and children's early adjustment to kindergarten. The following variables are examined:

- **Adjustment measures.** A set of items in the Fall 1998 Parent Interview asked about children's dispositions and behavior toward school during the first two months of the school year. Parents reported on three items as to whether their children 1) had complained about school, 2) were upset or reluctant to go to school, and 3) had

[1] U.S. Department of Education, National Center for Education Statistics. *ECLS-K Base Year Public-Use Data File User's Manual*. NCES2001-029. Washington, DC.

pretended to be sick to stay home from school. Response options were 1) more than once a week, 2) once a week or less and 3) not at all. For the purpose of this paper, options 1 and 2 were collapsed to indicate 'Yes', that the child had exhibited behaviors at some point in the first two months of school that are indicators of a child having difficulty making the transition to school.

- **Child factors.** The frequency of negative adjustment behaviors was examined in terms of children's sex, racial/ethnic background, age at entry to kindergarten, disability status, and whether the child attended center-based care before kindergarten.

- **Family factors.** In addition to child characteristics, negative adjustment behaviors were examined in relation to family type (two-parent household vs. other household composition), primary home language, mother's highest education level, and family socioeconomic status[2].

- **Kindergarten classroom factors.** School poverty level[3] (less than 50 percent subsidized meal eligible vs. 50 percent or higher subsidized meal eligible), kindergarten program type (part-day vs. full-day), and kindergarten class size were also examined in relation to negative adjustment.

[2] The family socioeconomic status variable used in this paper is a composite variable from the ECLS-K-Base Year Public-Use Data File. The composite is derived from the following variables: mother/female guardian's education level, father/male guardian's education level, mother/female guardian's occupation, and household income. For more information on the composite, please see Chapter 7 of the NCES User's Manual for the ECLS-K Base Year Public-Use Data file and Electronic Codebook (NCES 2001-029, revised).

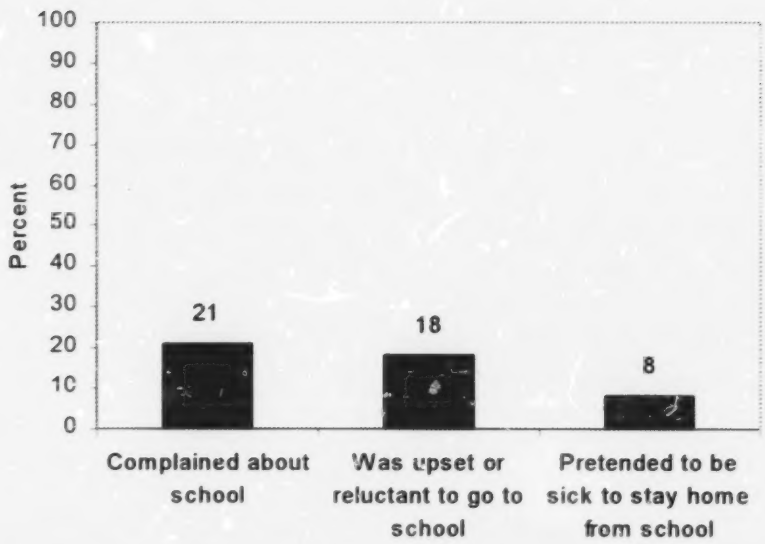
[3] Children were identified as attending a high poverty school if the percent of free or reduced lunch-eligible students in the school was 50 percent or more. If data on the percent of free/reduced lunch-eligible students was missing, data on the school's receipt of school-wide Title I assistance was used to determine school poverty level. Schools receiving school-wide Title I assistance were also designated as high poverty schools.

## Findings

- *What is the prevalence of three types of parent reported adjustment problems of first-time public school kindergartners?*

Parents reported that the majority of first-time public school kindergartners (72 percent) did not show signs of having difficulty adjusting to school during the first two months of the school year. A minority of the first-time public school kindergartners, 13 percent was reported to demonstrate one adjustment difficulty and 15 percent exhibited two or more adjustment difficulties. Among those children who presented some difficulty, parents reported that 21 percent of the children had complained about school, 18 percent were upset or reluctant to go to school, and 8 percent pretended to be sick to stay home from school. All of these behaviors may be signs of early/transition adjustment difficulties (figure 1).

Figure 1.—Percentage of public school kindergartners exhibiting early/transition adjustment difficulties in the first two months of school: Fall 1998




SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998–99: Base Year Public-use Data Files.

*Do some groups of children experience these three types of parent reported adjustment problems more than others?*

Bivariate analyses of the ECLS-K data showed that certain child, family, and kindergarten program characteristics were related to the percent of children who showed difficulties adjusting to school (table 2). Findings for each of the adjustment behavior difficulties are highlighted below.

**Child complained about school.** Slightly higher percentages of boys (23 vs. 20 percent), children from English speaking homes (22 vs. 19 percent), and children with disabilities (23 vs. 21 percent) complained about school in the first two months of kindergarten. Twenty-three percent of White[4] children complained about going to school, compared with 19 percent of Black children, and 15 percent of Asian/Pacific Islander children. Also, higher percents of American Indian/Alaska Native children complained about going to school than Black, non-Hispanic and Asian/Pacific Islander children (30 percent vs.19 and 15 percent, respectively). More children who had attended center-based care before kindergarten (22 vs. 20 percent) and those enrolled in full-day kindergarten programs (24 vs. 19 percent) complained about school than other kindergartners. Also, more children from the largest classrooms (25 or more students in the class) complained about school than children from the smallest classrooms (less than 17 students in the class) (23 vs. 19 percent, respectively).

**Child was upset or reluctant about going to school.** Slightly higher percentages of boys (20 vs. 17 percent), children with disabilities (21 vs. 18 percent), children attending high-poverty public schools (19 vs. 17 percent), and children in full-day kindergarten programs (21 vs. 16 percent) were upset about going to school. Over a quarter of American Indian/Alaska Native children were upset about going to school, compared with 18 percent of White, non-Hispanic, 17 percent of Black, non-Hispanic, 19 percent of Hispanic, and 15 percent of Asian/Pacific Islander children. Slightly more children whose mothers had not graduated from high school were upset about going to school than were those whose mothers had more than a high school diploma/GED (21 percent vs. 18 percent).

[4] White refers to White, non-Hispanic and Black refers to Black, non-Hispanic.

**Child pretended to be sick to stay home from school.** More children from the lowest socioeconomic status quintile pretended to be sick to stay home from school than children in the three highest SES quintiles (11 vs. 7 percent), and more children in the second lowest SES quintile pretended to be sick than children in the two highest SES quintiles (9 vs. 7 percent). Also, 13 percent of American Indian/Alaska Native children pretended to be sick to stay home from school, compared with 7 percent of White, non-Hispanic children. More children whose mothers had not graduated from high school pretended to be sick to stay home from school than children whose mothers had higher than a high school diploma/GED (11 percent with less than a HS diploma/GED vs. 9 percent with a HS diploma/GED vs. 7 percent with more than a HS diploma/GED). In addition, more children attending higher poverty schools (9 vs. 7 percent) and those in full-day kindergartens (9 vs. 7 percent) pretended to be sick to stay home from school than other kindergartners.

Although bivariate analyses showed several characteristics of children and program characteristics that were related to behaviors that may be associated to early school adjustment, such characteristics often occur together. For instance, primary home language is correlated with racial/ethnic background. In order to take this into account, logistic regression analyses were run and adjusted odds ratios were calculated for each adjustment behavior to determine which child, family and kindergarten program characteristics were significantly related to negative adjustment, after controlling for the effects of the other characteristics in the model.

A series of logistic regression models were run to identify the child, family, and kindergarten program characteristics that were significant predictors of children's adjustment behaviors. For each adjustment behavior, an initial logistic regression model was run, including all variables examined in the bivariate analyses. Following the initial logistic regression model, backward stepwise regression procedures were used to remove the least significant variables from the model. In general, the multivariate findings were similar to those in the bivariate analyses. Tables 3 through 5 provide the results for the final logistic regression models, which only included significant predictors of each adjustment behavior.

The multivariate analyses show the likelihood that kindergartners demonstrating adjustment behaviors in the first few months of school was associated with the following characteristics:

**Child complained about school (table 3).** In terms of the adjusted odds ratios[6], boys were 13 percent more likely than girls to complain about school. White children were 30 percent more likely than Black children, 16 percent more likely than Hispanic children and 41 percent more likely than Asian/Pacific Islander children to complain about school. Children who attended center-based care before kindergarten were 15 percent more likely to complain than those who did not and kindergartners in full-day programs were 31 percent more likely to complain than those in part-day programs. Children in the largest classrooms (25 or more children) were 24 percent more likely to complain about school than those in the smallest classrooms (less than 17 children).

**Child was upset or reluctant about going to school (table 4).** Boys were 24 percent more likely to be upset or reluctant to go to school than were girls, and children less than five years old were 31 to 39 percent more likely to be upset than children who were 5 ½ years or older. Children with disabilities were 19 percent more likely to be upset or reluctant to go to school than those without disabilities, and children from the lowest SES quintile were 20 percent more likely to exhibit such behavior than were children in the highest SES quintile. White children were 19 percent more likely to be upset or reluctant than Black children, and American Indian/Alaskan Native children were 51 percent more likely to be upset or reluctant than White. Also, full-day kindergartners were 30 percent more likely than part-day kindergartners to be upset or reluctant about school.

**Child pretended to be sick to stay home from school (table 5).** Children from the lowest SES quintile were 58 percent more likely and those in the second lowest quintile were 34 percent more likely to pretend to be sick to stay home from school than were children in the highest SES quintile. Also full-day kindergartners were 28 percent more likely to pretend to be sick than part-day kindergartners.

## Discussion and Summary

Much is known about the importance of cognitive and socioemotional development for success in school. The evidence about the importance of the first five years of life for early brain and behavioral development is increasing. Children's early experiences, with their parents and family, peers, teachers, community, and their own characteristics can influence early school outcomes. While each contributes, to some extent, to an easy or difficult transition to school, not much is known about children's adjustment behaviors and difficulties during the transition to kindergarten. This paper examined the prevalence of 3 parent-reported early adjustment behaviors for public school first-time kindergartners. It asked the question, whether the adjustment behaviors examined are related to the child (e.g., sex, racial/ethnicity, age at kindergarten entry, etc.), family (e.g., family type, primary home language, family socioeconomic status), and kindergarten program (e.g., school poverty level, program type, class size) characteristics. The adjustment behaviors examined in this report were: complaining about school, being upset or reluctant about going to school, and pretending to be sick to stay home from school.

A majority of first-time kindergartners adjusted to school in the first two months of the school year without many difficulties. However, 8 to 21 percent of first-time kindergartners exhibited some distress in one of the 3 behavioral measures during that time period. Adjustment to kindergarten during the early months of school was associated with some child, family and kindergarten program characteristics. Several of the commonly used factors for defining children's risk of school failure were related to children demonstrating adjustment difficulty behaviors when examined individually and net of other factors. These included being male, having a disability, or living in a lower socioeconomic status family. Net of other factors, two factors that have been consistently found to be associated with educational risk, family type and primary home language, were not associated with the demonstration of poor adjustment behaviors.

Two kindergarten program characteristics were found to be consistently associated with an increased likelihood of children's adjustment problems, as reported

[°] Calculated as ((Odds ratio-1)*100). This represents the percent increase (or decrease) in the adjusted odds of complaining about school associated with the category of interest relative to the comparison

by their parents: the length of the school day, and class size. Kindergartners attending full-day programs, and those in classrooms with 25 or more children were more likely to demonstrate adjustment problems even after controlling for other child (e.g., race/ethnicity, attendance in center-based programs prior to kindergarten) and family (e.g., socioeconomic status) characteristic differences.

This study has limitations. It only provides a snapshot of a very small set of behaviors reported by parents during the early months of kindergarten. It does not examine how these behaviors are associated with the children's social and emotional development or cognitive development at the end of kindergarten, or whether these behaviors are temporary or early signs of larger problems. Data from the ECLS-K, a longitudinal study, can be further analyzed to study these relationships at the end of kindergarten, first grade, and beyond. In addition, the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), the sister study of the ECLS-K can be used to examine the relationship of these behaviors with children's experiences before making the transition to kindergarten.

Despite these limitations, the findings in this paper suggest that some groups of children will have more difficulties making the transition to school than others. Some of the factors that relate to greater difficulties are associated with children's maturity, while others pertain to their living situation and to the kindergarten programs they attend. Information about the problems children may experience early in the school year and the relationships of these problems with child, family, and school/classroom characteristics may be useful to parents as they make decisions about their own children's schooling and to school officials and others as they design kindergarten programs.

---

category.

## REFERENCES

Belsky, J. & MacKinnon, C. (1994). Transition to school: Developmental trajectories and school experiences. *Early Education and Development*. 5(2). 106-119

Cox, M. (Winter 1999). Making the transition, *Early Developments*. 3(1), 4-6.

Dockett, S. & Perry, B. (1999). Starting school: What do the children say? *Early Child Development and Care*, 159, 107-119.

LeCompte, M.D. (1980). The civilizing of children: How young children learn to become students. *The Journal of Thought*. 15(3), 105-127.

Pianta, R., Rimm-Kaufman, S. & Cox, M. (1999). Introduction: An ecological approach in kindergarten transition. In R. Pianta and M. Cox (ed). *The Transition to Kindergarten. A Series from the National Center for early Development and Learning*. (pp. 3-12). Baltiomore, MD: Paul H. Brookes Publishing, Co.

Ramey, C.T. & Ramey, S. L. (1992, October). *Child and Family Transitions to School: Measuring Adaptation throughout the Elementary School Year*. Unpublished paper commissioned by the U.S. Department of Education, National Center for Education Statistics, Washington, DC.

Reynolds, A. J. (1991, April). *Early School Adjustment of Children at Risk*. Paper presented at the biennial meeting of the Society for Research in Child Development, April 18, 1991, Seattle, WA.

Table 1.—Sample sizes, population counts, and percent distributions of first-time public school kindergartners, by child, family, and classroom characteristics: Fall 1998

| Characteristics | Sample size | Population size | Percent |
|---|---|---|---|
| All kindergartners | 13,602 | 3,147,038 | 100 |
| Child Measures | | | |
| Sex | | | |
| Female | 6,711 | 1,536,290 | 49 |
| Male | 6,891 | 1,610,748 | 51 |
| Race/ethnicity | | | |
| White, non-Hispanic | 7,270 | 1,738,675 | 55 |
| Black, non-Hispanic | 2,158 | 519,905 | 16 |
| Hispanic | 2,601 | 645,155 | 21 |
| Asian/Pacific Islander | 943 | 109,009 | 3 |
| American Indian/Alaska Native | 244 | 55,412 | 2 |
| Other, non-Hispanic | 369 | 75,014 | 2 |
| Age at entry | | | |
| Under 5 | 644 | 137,428 | 4 |
| 5 to less than 5 ½ | 5,957 | 1,395,013 | 44 |
| 5 ½ to less than 6 | 5,933 | 1,371,357 | 44 |
| 6 years and older | 1,065 | 242,571 | 8 |
| Disabled | | | |
| Yes | 1,883 | 452,078 | 14 |
| No | 11,702 | 2,690,795 | 86 |
| Attended a center-based program | | | |
| Yes | 10,068 | 2,338,975 | 75 |
| No | 3,496 | 799,194 | 25 |

NOTE: Row percents may not add to 100 due to rounding.

Source: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998–99: Base-year Public-use Data Files.

Table 1.--Sample sizes, population counts, and percent distributions of first-time public school kindergartners, by child, family, and classroom characteristics: Fall 1998—Continued

| Characteristics | Sample size | Population size | Percent |
|---|---|---|---|
| Family Measures | | | |
| Family type | | | |
| Two parent family | 9,985 | 2,302,839 | 73 |
| Single/no parent family | 3,617 | 844,199 | 27 |
| Family's home language | | | |
| English | 11,609 | 2,730,445 | 87 |
| Non-English | 1,963 | 409,593 | 13 |
| Mother's education | | | |
| Less than HS diploma | 2,196 | 515,092 | 17 |
| HS diploma/GED | 4,432 | 1,034,991 | 33 |
| More than HS diploma/GED | 6,751 | 1,545,026 | 50 |
| Family socioeconomic status | | | |
| Lowest quintile | 2,966 | 692,242 | 22 |
| Second quintile | 2,938 | 688,918 | 22 |
| Third quintile | 2,807 | 650,301 | 21 |
| Fourth quintile | 2,562 | 587,759 | 19 |
| Highest quintile | 2,329 | 527,818 | 17 |
| School Measures | | | |
| Program type | | | |
| Full-day | 6,990 | 1,633,807 | 52 |
| Part-day | 6,612 | 1,513,230 | 48 |
| School poverty level | | | |
| Less than 50% poverty | 6,616 | 1,496,664 | 55 |
| 50% or higher poverty | 5,000 | 1,206,966 | 45 |
| Class size | | | |
| Less than 17 children | 1,680 | 359,029 | 13 |
| 17 to 24 children | 8,371 | 1,956,095 | 69 |
| 25 or more children | 2,225 | 519,370 | 18 |

NOTE: Row percents may not add to 100 due to rounding.

Source: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998–99: Base-year Public-use Data Files.

Table 2.—Percent of public school kindergartners exhibiting certain adjustment behaviors, by child, family, and school characteristics: Fall 1998

| Characteristics | Adjustment behaviors | | |
|---|---|---|---|
| | Complained about school | Upset or reluctant to go to school | Pretended to be sick to stay home from school |
| All kindergartners | 21 | 18 | 8 |
| Child Measures | | | |
| Sex | | | |
| Female | 20 | 17 | 8 |
| Male | 23 | 20 | 8 |
| Race/ethnicity | | | |
| White, non-Hispanic | 23 | 18 | 7 |
| Black, non-Hispanic | 19 | 17 | 8 |
| Hispanic | 20 | 19 | 9 |
| Asian/Pacific Islander | 15 | 15 | 9 |
| American Indian/Alaska Native | 30 | 28 | 13 |
| Other, non-Hispanic | 23 | 21 | 8 |
| Age at entry | | | |
| Under 5 | 22 | 21 | 8 |
| 5 to less than 5 ½ | 23 | 20 | 9 |
| 5 ½ to less than 6 | 20 | 17 | 8 |
| 6 years and older | 20 | 16 | 7 |
| Disabled | | | |
| Yes | 23 | 21 | 8 |
| No | 21 | 18 | 8 |
| Attended a center-based program | | | |
| Yes | 22 | 19 | 8 |
| No | 20 | 18 | 8 |

Source: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998–99: Base-year Public-use Data Files.

Table 2.—Percent of public school kindergartners exhibiting certain adjustment behaviors, by child, family, and school characteristics: Fall 1998—Continued

| Characteristics | Adjustment behaviors | | |
|---|---|---|---|
| | Complained about school | Upset or reluctant to go to school | Pretended to be sick to stay home from school |
| Family Measures | | | |
| Family type | | | |
| Two parent family | 22 | 18 | 8 |
| Single/no parent family | 21 | 19 | 9 |
| Family's home language | | | |
| English | 22 | 18 | 8 |
| Non-English | 19 | 18 | 9 |
| Mother's education | | | |
| Less than HS diploma | 21 | 21 | 11 |
| HS diploma/GED | 21 | 18 | 9 |
| More than HS diploma/GED | 22 | 18 | 7 |
| Family socioeconomic status | | | |
| Lowest quintile | 21 | 21 | 11 |
| Second quintile | 20 | 18 | 9 |
| Third quintile | 20 | 17 | 7 |
| Fourth quintile | 22 | 18 | 7 |
| Highest quintile | 23 | 18 | 7 |
| School Measures | | | |
| Program type | | | |
| Full-day | 24 | 21 | 9 |
| Part-day | 19 | 16 | 7 |
| School poverty level | | | |
| Less than 50% poverty | 21 | 17 | 7 |
| 50% or higher poverty | 22 | 19 | 9 |
| Class size | | | |
| Less than 17 children | 19 | 17 | 8 |
| 17 to 24 children | 21 | 18 | 8 |
| 25 or more children | 23 | 19 | 8 |

Source: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998–99: Base-year Public-use Data Files.

Table 2a.—Standard errors for percent of public school kindergartners exhibiting certain adjustment behaviors, by child, family, and school characteristics: Fall 1998

| Characteristics | Adjustment behaviors | | |
|---|---|---|---|
| | Complained about school | Upset or reluctant to go to school | Pretended to be sick to stay home from school |
| All kindergartners | 0.5 | 0.5 | 0.3 |
| Child Measures | | | |
| Sex | | | |
| Female | 0.6 | 0.6 | 0.4 |
| Male | 0.6 | 0.6 | 0.4 |
| Race/ethnicity | | | |
| White, non-Hispanic | 0.6 | 0.7 | 0.4 |
| Black, non-Hispanic | 1.1 | 0.8 | 0.6 |
| Hispanic | 1.1 | 0.9 | 0.6 |
| Asian/Pacific Islander | 2.4 | 2.1 | 2.5 |
| American Indian/Alaska Native | 3.3 | 2.3 | 1.8 |
| Other, non-Hispanic | 2.3 | 2.2 | 1.5 |
| Age at entry | | | |
| Under 5 | 1.9 | 1.8 | 1.5 |
| 5 to less than 5 ½ | 0.6 | 0.6 | 0.4 |
| 5 ½ to less than 6 | 0.8 | 0.6 | 0.3 |
| 6 years and older | 1.3 | 1.3 | 0.9 |
| Disabled | | | |
| Yes | 1.3 | 1.1 | 0.7 |
| No | 0.5 | 0.5 | 0.3 |
| Attended a center-based program | | | |
| Yes | 0.6 | 0.5 | 0.3 |
| No | 0.7 | 0.8 | 0.7 |

Source: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998–99: Base-year Public-use Data Files.

Table 2a. Standard errors for percent of public school kindergartners exhibiting certain adjustment behaviors, by child, family, and school characteristics: Fall 1998—Continued

| Characteristics | Adjustment behaviors | | |
|---|---|---|---|
| | Complained about school | Upset or reluctant to go to school | Pretended to be sick to stay home from school |
| Family Measures | | | |
| Family type | | | |
| Two parent family | 0.6 | 0.5 | 0.4 |
| Single/no parent family | 0.9 | 0.8 | 0.5 |
| Family's home language | | | |
| English | 0.5 | 0.5 | 0.3 |
| Non-English | 1.3 | 1.3 | 0.8 |
| Mother's education | | | |
| Less than HS diploma | 1.2 | 1.1 | 0.7 |
| HS diploma/GED | 0.7 | 0.7 | 0.5 |
| More than HS diploma/GED | 0.6 | 0.5 | 0.3 |
| Family socioeconomic status | | | |
| Lowest quintile | 1.1 | 1.0 | 0.6 |
| Second quintile | 0.7 | 0.9 | 0.5 |
| Third quintile | 0.8 | 0.8 | 0.6 |
| Fourth quintile | 1.0 | 0.9 | 0.5 |
| Highest quintile | 0.9 | 0.9 | 0.5 |
| School Measures | | | |
| Program type | | | |
| Full-day | 0.7 | 0.6 | 0.4 |
| Part-day | 0.6 | 0.6 | 0.4 |
| School poverty level | | | |
| Less than 50% poverty | 0.5 | 0.5 | 0.4 |
| 50% or higher poverty | 0.9 | 0.7 | 0.5 |
| Class size | | | |
| Less than 17 children | 1.1 | 1.1 | 0.6 |
| 17 to 24 children | 0.6 | 0.6 | 0.4 |
| 25 or more children | 1.2 | 0.9 | 0.6 |

Source: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998–99: Base-year Public-use Data Files.

Table 3.—Adjusted odds ratios and logistic regression model for first-time public school kindergartners who complained about school during the first two months of the school year, by child and school characteristics: Fall 1998

| Characteristics | Odds Ratio | B | s.e. | T value | Significance |
|---|---|---|---|---|---|
| Intercept | | -1.15 | 0.149 | -7.73 | .0000 |
| Male | | | | | |
| v. Female | 1.134 | 0.13 | 0.043 | 2.94 | .0042 |
| Child's Race/ethnicity | | | | | |
| Black, non-Hispanic v. White, non-Hispanic | .703 | -0.35 | 0.082 | -4.30 | .0000 |
| Hispanic v. White, non-Hispanic | .844 | -0.17 | 0.072 | -2.34 | .0214 |
| Asian/Pacific Islander v. White, non-Hispanic | .587 | -0.53 | 0.174 | -3.06 | .0029 |
| American Indian v. White, non-Hispanic | | 0.26 | 0.176 | 1.49 | .1395 |
| Other, non-Hispanic v. White, non-Hispanic | | 0.05 | 0.130 | 0.36 | .7195 |
| Child's age | | | | | |
| 5 to less than 5 ½ years v. Under 5 years | | -0.07 | 0.133 | -0.51 | 6117 |
| 5 ½ to less than 6 years v. Under 5 years | .739 | -0.30 | 0.134 | -2.26 | .0261 |
| 6 years and older v. Under 5 years | | -0.23 | 0.142 | -1.65 | .1025 |
| Attended center-based care before kindergarten | | | | | |
| v. did not attend center-based care | 1.148 | 0.14 | 0.051 | 2.72 | 0079 |
| Part-day kindergarten program | | | | | |
| v. full-day kindergarten program | .693 | -0.37 | 0.062 | -5.96 | .0000 |
| Class size | | | | | |
| 17 to 24 children v. less than 17 | | 0.12 | 0.074 | 1.62 | .1078 |
| 25 or more children v. less than 17 | 1.236 | 0.21 | 0.102 | 2.08 | .0405 |

NOTE: Only significant predictors were retained in the final logistic regression model. Odds ratios after controlling for other measures in the table. Only significant odds ratios are included in the table.

Source: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998–99: Base-year Public-use Data Files.

Table 4.—Adjusted odds ratios and logistic regression model for first-time public school kindergartners who were upset or reluctant to go to school during the first two months of the school year, by child, family, and school characteristics: Fall 1998

| Characteristics | Odds Ratio | B | s.e. | T value | Significance |
|---|---|---|---|---|---|
| Intercept | | -1.21 | 0.141 | -8.58 | .0000 |
| Male | | | | | |
| v. Female | 1.242 | 0.22 | 0.046 | 4.77 | .0000 |
| Child's Race/ethnicity | | | | | |
| Black, non-Hispanic v. White, non-Hispanic | .8125 | -0.21 | 0.090 | -2.32 | .0227 |
| Hispanic v. White, non-Hispanic | | -0.02 | 0.068 | -0.35 | .7276 |
| Asian/Pacific Islander v. White, non-Hispanic | | -0.25 | 0.154 | -1.60 | .1135 |
| American Indian v. White, non-Hispanic | 1.511 | 0.41 | 0.111 | 3.71 | .0004 |
| Other, non-Hispanic v. White, non-Hispanic | | 0.13 | 0.142 | 0.93 | .3532 |
| Child's age | | | | | |
| 5 to less than 5 ½ years v. Under 5 years | | -0.15 | 0.113 | -1.29 | .2014 |
| 5 ½ to less than 6 years v. Under 5 years | .689 | -0.37 | 0.115 | -3.23 | .0017 |
| 6 years and older v. Under 5 years | .614 | -0.49 | 0.139 | -3.50 | .0007 |
| Disabled | | | | | |
| v. not disabled | 1.188 | 0.17 | 0.069 | 2.49 | .0148 |
| Family socioeconomic status (SES) | | | | | |
| First (lowest) quintile vs. fifth (highest) quintile | 1.201 | 0.18 | 0.091 | 2.01 | .0478 |
| Second quintile vs. fifth (highest) quintile | | 0.02 | 0.077 | 0.28 | .7805 |
| Third quintile vs. fifth (highest) quintile | | -0.06 | 0.084 | -0.68 | .4998 |
| Fourth quintile vs. fifth (highest) quintile | | 0.02 | 0.073 | 0.23 | .8199 |
| Part-day kindergarten program | | | | | |
| v. full-day kindergarten program | .701 | -0.35 | 0.064 | -5.57 | .0000 |

NOTE: Only significant predictors were retained in the final logistic regression model. Odds ratios after controlling for other measures in the table. Only significant odds ratios are included in the table.

Source: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998–99: Base-year Public-use Data Files.

Table 5.—Adjusted odds ratios and logistic regression model for first-time public school kindergartners who pretended to be sick to stay home from school during the first two months of the school year, by child, family, and school characteristics: Fall 1998

| Characteristics | Odds Ratio | B | s.e. | T value | Significance |
|---|---|---|---|---|---|
| Intercept | | -2.46 | 0.082 | -29.93 | .0000 |
| Family socioeconomic status (SES) | | | | | |
| First (lowest) quintile vs. fifth (highest) quintile | 1.575 | 0.45 | 0.093 | 4.89 | .0000 |
| Second quintile vs. fifth (highest) quintile | 1.344 | 0.30 | .086 | 3.46 | .0008 |
| Third quintile vs. fifth (highest) quintile | | 0.00 | 0.106 | 0.00 | .9980 |
| Fourth quintile vs. fifth (highest) quintile | | -0.04 | 0.106 | -0.36 | .7205 |
| Part-day kindergarten program v. full-day kindergarten program | .724 | -0.32 | 0.076 | -4.24 | .0001 |

NOTE: Only significant predictors were retained in the final logistic regression model. Odds ratios after controlling for other measures in the table. Only significant odds ratios are included in the table

Source: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998–99: Base-year Public-use Data Files.

**U.S. Department of Education**
*Office of Educational Research and Improvement (OERI)*
*National Library of Education (NLE)*
*Educational Resources Information Center (ERIC)*

# REPRODUCTION RELEASE

(Specific Document)

## I. DOCUMENT IDENTIFICATION:

Title: Adjustment to Kindergarten: Child, Family, and Kindergarten Program Factors

Author(s): Elvira Germino Hausken and Amy H. Rathbun

Corporate Source: U.S. Ed. National Center for Education Statistics + ESSI/AIR

Publication Date: AERA 2002

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

**Level 1**

☑ Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

**Level 2A**

☐ Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

**Level 2B**

☐ Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

*I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.*

**Sign here, please**

| | | |
|---|---|---|
| Signature: Elvira Germino Hausken | Printed Name/Position/Title: Elvira Germino Hausken, Educ. Statistician | |
| Organization/Address: U.S. ED. NCES, 1990 K St. NW Washington, DC 20006 | Telephone: 202-502-7352 | FAX: 202 502-7077 |
| | E-Mail Address: hausken@ed.gov | Date: 7/16/02 |

PS 030263

## III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

| |
|---|
| Publisher/Distributor: |
| Address: |
| Price: |

## IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

| |
|---|
| Name: |
| Address: |

## V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

**Karen E. Smith, Acquisitions**
**ERIC/EECE, University of Illinois**
**Children's Research Center**
**51 Gerty Drive**
**Champaign, IL 61820**

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to: